

Substitute Specification

Express Mail Label No. EV 441646903 US

[0001] FIBER OPTIC SECURITY SYSTEM AND CONTROL METHOD THEREOF**[0002] FIELD OF THE INVENTION**

[0003] The present invention relates to a fiber optic security system and control method thereof, and more particularly, to a fiber optic security system and control method thereof comprising a plurality of channel constituted an optical transmitter module, an optical transmission line, and an optical receiver module. The security system can be easily set on a window, doors or fences without doing harms to them. Also The security system improves security level by operating the channels randomly.

[0004] BACKGROUND

[0005] A fiber optic security system monitors an area which the system installed, and discerns whether any intrusion or attempt to intrude is or not. It is installed on such facilities as an armed force, airports, power plants, detention houses etc. to protect the facilities from possible intruders. It can reduce the number of guards and has the advantage of providing a substitutive means of communication using the optical fibers installed.

[0006] There are some methods of using optical fibers as a sensor; method for measuring dynamic variation of optical signals by using the optical speckle, method for measuring static variation of the strength of optical signals due to optical losses, and method for measuring physical fluctuation of optical fibers by using the back scattering of optical signals.

[0007] A security system using the optical speckle to detect an intruder discerns whether there is any intrusion by cutting off some part of optical signals at an end of the optical fibers and measuring the strength of the optical signals

all to
Center
2/3
10/16/06